

**REMARKS**

This Amendment is in response to a non final Office action mailed on 14 April 2005 (Paper No. 20050401, *hereinafter* the present Office action). Upon entry of this amendment, claims 1-11 and 13-22 will be pending. Applicant has canceled claim 12 without prejudice or disclaimer by this amendment, amended claims 11, 14, 15, 20 and 21 and newly added claim 22 by this amendment.

In the present Office action, the Examiner rejected claims 11, 12 and 21 under 35 U.S.C. 102 (e) as being anticipated by USP 6,226,740 to Iga. Applicant has amended claim 11 by this amendment making this rejection moot.

In the present Office action, the Examiner has rejected claims 7 and 18 under 35 U.S.C. 102 (b) as being anticipated by USP 5,784,628 to Reneris. Applicant has the following comments.

Regarding claim 7, Applicant claims "reading out a boot image from the boot image storage device". In the present Office action, the Examiner states that this feature is found at column 16, lines 55-56 of Reneris. Applicant disagrees. Applicant submits that column 16, lines 55-56 of Reneris states, "saving the device state of the device in the memory storage area;" Applicant submits that there is no mention of a boot image storage device in this cited section of Reneris or anywhere in the reference of Reneris. Because the rejection of claim

7 fails the all elements rule, the 102 rejection of claim 7 must be withdrawn.

It appears that in the present Office action, the Examiner seems to be equating the “device state” of Reneris with Applicant’s “boot image”. Applicant submits that the device state of Reneris is merely one of power up, power query, power suspend, power hibernate and power down as listed at the bottom of column 14 of Reneris. Applicant submits that a “device state” of Reneris cannot read on Applicant’s boot image.

Further, Applicant submits that the “device state” of Reneris is gleaned from the device itself, not from a boot image memory as claimed by Applicant. When many devices are checked in Reneris, the device states come from the many devices and are scattered all over the place and are not derived from a boot image memory as in Applicant’s claimed invention. Therefore, Applicant submits that there is no comparable “boot image storage device” in Reneris. For this reason, the rejection of claim 7 must be withdrawn.

It is also interesting to note that at the top of Page 8 of the present Office action, in the rejection of claim 1, the Examiner states that the boot image storing device is found at column 5, lines 62-64 of Reneris. Column 5, lines 62-64 of Reneris discusses ROM 19 that stores bootup firmware, not a memory that stores device states. Thus, the Examiner seems to be self-contradicting himself in the present Office action as to what feature of Reneris corresponds to Applicant’s boot image storing device and what feature of Reneris

corresponds to Applicant's boot image. At first the Examiner states that the device states of Reneris corresponds to Applicant's boot image, and then later the Examiner states that bootup firmware in ROM 19 corresponds to Applicant's boot image. This is self contradictory.

In the present Office action, the Examiner has rejected claims 1, 2, 4, 6, 8, 9, 16 and 17 under 35 U.S.C. 103 (a) as being unpatentable over Reneris in view of Iga. Applicant has the following comments.

Regarding claim 1, Applicant claims "a boot image storing device for storing a boot image of the computer". On Page 8 of the Office action, the Examiner states that this limitation is found at column 5, lines 62-64 of Reneris. This section of Reneris states that a bootup firmware is stored in ROM 19. Thus, here, the Examiner seems to be equating ROM 19 of Reneris with Applicant's boot image memory and bootup firmware of Reneris with Applicant's boot image. This is self-contradictory on the part of the Examiner as the Examiner was previously equating the device states of Reneris and not the bootup firmware to Applicant's boot image. This is also self-contradictory as the device states and the processor states of Reneris are not and can not be derived from ROM 19 of Reneris. Because of these inconsistencies in the present Office action, the rejection of claim 1 must be withdrawn.

Again regarding claim 1, Applicant claims “a composition memory for setting an instruction pointer of the central processing unit to a specific region of the main memory storing the boot image, wherein the central processing unit loads the boot image from the specific region of the main memory in response to the instruction pointer, allowing an operating system to perform control functions.” On Page 8 of the present Office action, the Examiner states that this limitation is found at column 4, lines 16-22 and lines 32-36 of Iga without any further explanation as to what features of Iga correspond to Applicant’s composition memory that sets the instruction pointer to the location in main memory where the boot image is. Further, Applicant has studied the entire reference of Iga and cannot find any comparable features in Iga that can correspond to Applicant’s composition memory that has the location in main memory where the boot image is stored. Applicant therefore submits that neither Iga nor Reneris nor the combination thereof fairly teaches or suggests Applicant’s composition memory that has the location in main memory where the boot image is stored. For this reason, the rejection to claim 1 must be withdrawn.

In the rejection of claim 1, the Examiner relies on Reneris for a teaching of nearly every feature except for 1) a teaching of the power backed up main memory and 2) for a teaching of the composition memory feature. On Page 8 of the present Office action, the Examiner turns to Iga for a teaching of these features. Applicant objects. Applicant submits that one having ordinary skill in the art would not be inclined to turn to Iga to fill in for the deficiencies of Reneris. Reneris pertains to conservation of power of a computer. Iga

pertains to shortening booting time. Applicant submits that one having ordinary skill in the art would not be inclined to turn to a reference about shortening booting time to fill in for the deficiencies of a reference that pertains to power conservation. References must be considered as a whole. Shortening booting time is entirely unrelated to power conservation and thus would not be a place one having ordinary skill in the art to turn to fill in for the deficiencies of an invention that relates to power management. Because the references of Reneris and Iga cannot be combined, the rejection of claim 1 must be withdrawn.

Applicant further submits that in Reneris, the states of the devices and the processor is saved when being powered down for use later when the computer is powered back up again. Reneris is not at all concerned about speed. Instead, Reneris is concerned about preserving states of devices and states of a processor when powering down so that these states can be used when the computer is being powered up again. Iga is concerned about speed and is not concerned about preservation of data. In Iga, the codes are copied in to high speed memory not to preserve data but only to provide for quicker access when the computer is powered up again. Applicant submits that one having ordinary skill in the art would not be inclined to turn to a reference that pertains to saving time to fill in for a deficiency that pertains to preservation of data that would ordinarily be lost when the power goes off. Because of this diversity between Reneris and Iga, there is no motivation to combine. Therefore, the rejection to claim 1 must be withdrawn.

Applicant further submits that in Reneris, the device states that are saved before powering down the computer are different each time the computer is powered down. In other words, the device states in Reneris vary each time the computer is powered down, and are thus not fixed. However, in Iga, the codes are read out of ROM 13, and are thus fixed throughout the life of the computer because the contents of a read only memory can never be changed. In Reneris, the device states are not derived from a read only memory, and can thus be different each time the computer is to be powered down. Applicant submits that this diversity between Reneris and Iga also makes Iga not combinable with Reneris. One having ordinary skill in the art would not be inclined to turn to a reference that pertains to copying fixed codes into a faster memory to fill in for the deficiencies of a reference that pertains to saving variable and changing states of devices so that they do not become lost. Because of this huge discrepancy between Reneris and Iga, Applicant submits that one would not be inclined to turn to Iga to fill in for the deficiencies of Reneris. Therefore, the rejection of claim 1 must be withdrawn.

In the rejection of claim 1, 2, 4, 6, 8, 9, 16 and 17 as well as in the rejection of claims 3, 5 and 19, Applicant submits that the Examiner is picking and choosing different features from each of Reneris and Iga to reject Applicant's claims without valid justification. In Reneris, the device states are changeable and vary with each computer use. Reneris seeks to preserve these device states when power is disconnected. Iga is about increasing computer speed, not about data preservation. Also, Iga copies a fixed and unvarying set of codes from

a ROM to another faster memory and is not about preserving variable data. Because of these vast dissimilarities between Reneris and Iga, the picking and choosing of different features from both Iga and Reneris to reject Applicant's claims is unjustified.

In the present Office action, the Examiner rejected claims 10 and 13 under 35 U.S.C. 103 (a) as being unpatentable over Iga in view of USP 6,122,734 to Jeon. Applicant has the following comments.

Regarding claim 10, Applicant claims, "a basic input/output system memory setting the instruction pointer". On page 14 of the present Office action, the Examiner states that this limitation is taught by column 4, lines 16-22 of Iga. Applicant disagrees.

Applicant has reviewed column 14, lines 16-22 of Iga along with the entire reference of Iga and cannot find any evidence of ROM 13 of Iga or any other memory in Iga that is used to set an instruction pointer of where in cache 22 the codes are stored. Applicant submits that the entire reference to Iga is silent as to how the processor of Iga knows at what address in cache 22 the codes are stored. In claim 10, Applicant claims that this address is stored in found from BIOS memory. Applicant submits that there is no teaching in Iga of finding where in cache 22 the codes are stored from a BIOS memory. Because the applied prior art fails to teach or suggest this feature, the rejection of claim 10 cannot stand.

Regarding claims 10 and 13, the Examiner uses Iga to reject every limitation of claim 10 except for the “checking initializing steps and faults of the hardware components of the computer”. The Examiner turns to Jeon for a teaching of this feature and justifies the combination by saying that Jeon teaches providing a CD-ROM disk for both booting and computer repair. Applicant disagrees. Applicant submits that one having ordinary skill in the art would not be inclined to turn to Jeon to fill in for the deficiencies of Iga.

Iga seeks to save time by transferring boot codes from ROM to a higher speed memory. Jeon pertains making a CD-ROM that contains both boot programs and application programs on a single CD. Applicant submits that one having ordinary skill in the art would not be inclined to turn to a reference that pertains to making bootable CDs and application CDs on a single CD to fill in for the deficiencies of a reference that pertains to reducing booting time by copying boot codes from a ROM in a computer to a faster memory. Applicant submits that having application programs on the boot CD does not serve to save boot time. Also, Applicant submits that Iga never discusses loading application programs from a CD. Iga never even mentions CDs not to mention a method of making CDs. Because of the dissimilarity between these two references, Applicant submits that there is no credible motivation to combine Jeon with Iga to reject Applicant’s claims. Therefore, the rejection of claim 10 must be withdrawn.

In the present Office action, the Examiner has rejected claims 14, 15 and 20 under 35



U.S.C. 103 (a) as being unpatentable over Iga in view of USP 6,009,520 to Gharda. The Examiner relies on Iga for a teaching of every feature except the reading out the boot image in compressed format. The Examiner justifies the combination by citing column 1, lines 36-42 of Gharda and saying that Gharda also seeks to achieve a faster boot. Applicant disagrees.


Applicant submits that Gharda as a whole is about providing an improved BIOS that can be edited when a plug in module is attached. Gharda is not about speeding up a boot process. As a whole, Gharda pertains to an entirely unrelated problem than speeding up a boot. Applicant submits that one having ordinary skill in the art would not be inclined to turn to a reference that pertains to allowing third parties to customize a BIOS easily to fill in for deficiencies of a reference that pertains to improving boot speed.

Applicant has newly added claim 22 by this amendment to claim that the location of the boot image in main memory is found from BIOS memory. Entry of and favorable examination of this claim is respectfully requested.

No fees are incurred by the filing of this Amendment.

In view of the above, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

Respectfully submitted,

  
\_\_\_\_\_  
Robert E. Bushnell,  
Attorney for the Applicant  
Registration No.: 27,774

1522 "K" Street N.W., Suite 300  
Washington, D.C. 20005  
(202) 408-9040

Folio: P56254  
Date: 7/13/05  
I.D.: REB/ML